Abstract

The present invention relates to an improved structure for an electric machine of medium frequency and low speed, in particular, to a multiple-pole electric machine. The rotor of the multiple pole electric machine of the present invention is of p-m, of electric excitation, or of induction. The number of poles is equal to or more than 8. Solid wires are arranged into layers in the slots to form the wave windings of the armature with an equal or unequal pitch. The windings are located in the slots and each turn of the wires contact the wall of the iron core. Compared with the prior art, the multiple-pole electric machine of this invention saves copper and iron materials, increases output, improves efficiency and makes the manufacturing of the windings easy. It can apply to other case in addition to replacing a conventional medium frequency electric machine.